



SEQUENCE LISTING

<110> DARNAY, BRYANT G.

<120> METHODS AND COMPOSITIONS USING POLYNUCLEOTIDES AND
POLYPEPTIDES OF RANK-ASSOCIATED INHIBITOR (RAIN)

<130> UTSC:761US

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<141> 2003-07-29

<150> 60/399,205

<151> 2002-07-29

<160> 23

<170> PatentIn Ver. 2.1

<210> 1

<211> 729

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(729)

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1				5					10						15	

ggc	gcg	cag	gac	aag	gag	cat	cca	aga	tac	ctg	atc	cca	gaa	ctt	tgc	96
Gly	Ala	Gln	Asp	Lys	Glu	His	Pro	Arg	Tyr	Leu	Ile	Pro	Glu	Leu	Cys	
			20					25					30			

aaa	cag	ttt	tac	cat	tta	ggc	tgg	gtc	act	ggg	act	gga	gga	gga	att	144
Lys	Gln	Phe	Tyr	His	Leu	Gly	Trp	Val	Thr	Gly	Thr	Gly	Gly	Gly	Ile	
		35					40					45				

agc	ttg	aag	cat	ggc	gat	gaa	atc	tac	att	gct	cct	tca	gga	gtg	caa	192
Ser	Leu	Lys	His	Gly	Asp	Glu	Ile	Tyr	Ile	Ala	Pro	Ser	Gly	Val	Gln	
	50				55					60						

aag	gaa	cga	att	cag	cct	gaa	gac	atg	ttt	gtt	tgt	gat	ata	aat	gaa	240
Lys	Glu	Arg	Ile	Gln	Pro	Glu	Asp	Met	Phe	Val	Cys	Asp	Ile	Asn	Glu	
	65				70				75						80	

aag gac ata agt gga cct tcg cca tcg aag aag cta aaa aaa agc cag	288
Lys Asp Ile Ser Gly Pro Ser Pro Ser Lys Lys Leu Lys Lys Ser Gln	
85 90 95	
tgt act cct ctt ttc atg aat gct tac aca atg aga gga gca ggt gca	336
Cys Thr Pro Leu Phe Met Asn Ala Tyr Thr Met Arg Gly Ala Gly Ala	
100 105 110	
gtg att cat acc cac tct aaa gct gct gtg atg gcc aca ctt ctc ttt	384
Val Ile His Thr His Ser Lys Ala Ala Val Met Ala Thr Leu Leu Phe	
115 120 125	
cca gga cgg gag ttt aaa att aca cat caa gag atg ata aaa gga ata	432
Pro Gly Arg Glu Phe Lys Ile Thr His Gln Glu Met Ile Lys Gly Ile	
130 135 140	
aag aaa tgt act tcc gga ggg tat tat aga tat gat gat atg tta gtg	480
Lys Lys Cys Thr Ser Gly Gly Tyr Tyr Arg Tyr Asp Asp Met Leu Val	
145 150 155 160	
gta ccc att att gag aat aca cct gag gag aaa ggc ctc aaa gat aga	528
Val Pro Ile Ile Glu Asn Thr Pro Glu Glu Lys Gly Leu Lys Asp Arg	
165 170 175	
atg gct cat gca atg aat gaa tac cca gac tcc tgt gca gta ctg gtc	576
Met Ala His Ala Met Asn Glu Tyr Pro Asp Ser Cys Ala Val Leu Val	
180 185 190	
aga cgt cat gga gta tat gtg tgg ggg gaa aca tgg gag aag gcc aaa	624
Arg Arg His Gly Val Tyr Val Trp Gly Glu Thr Trp Glu Lys Ala Lys	
195 200 205	
acc atg tgt gag tgt tat gac tat tta ttt gat att gcc gta tca atg	672
Thr Met Cys Glu Cys Tyr Asp Tyr Leu Phe Asp Ile Ala Val Ser Met	
210 215 220	
aag aaa gta gga ctt gat cct tca cag ctc cca gtt gga gaa aat gga	720
Lys Lys Val Gly Leu Asp Pro Ser Gln Leu Pro Val Gly Glu Asn Gly	
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att gtg taa	729
Ile Val	

<210> 2

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<212> PRT

<213> Homo sapiens

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Gly Ala Gln Asp Lys Glu His Pro Arg Tyr Leu Ile Pro Glu Leu Cys
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Lys Gln Phe Tyr His Leu Gly Trp Val Thr Gly Thr Gly Gly Ile
      35             40             45
Ser Leu Lys His Gly Asp Glu Ile Tyr Ile Ala Pro Ser Gly Val Gln
      50             55             60
Lys Glu Arg Ile Gln Pro Glu Asp Met Phe Val Cys Asp Ile Asn Glu
      65             70             75             80
Lys Asp Ile Ser Gly Pro Ser Pro Ser Lys Lys Leu Lys Lys Ser Gln
      85             90             95
Cys Thr Pro Leu Phe Met Asn Ala Tyr Thr Met Arg Gly Ala Gly Ala
      100            105            110
Val Ile His Thr His Ser Lys Ala Ala Val Met Ala Thr Leu Leu Phe
      115            120            125
Pro Gly Arg Glu Phe Lys Ile Thr His Gln Glu Met Ile Lys Gly Ile
      130            135            140
Lys Lys Cys Thr Ser Gly Gly Tyr Tyr Arg Tyr Asp Asp Met Leu Val
      145            150            155            160
Val Pro Ile Ile Glu Asn Thr Pro Glu Glu Lys Gly Leu Lys Asp Arg
      165            170            175
Met Ala His Ala Met Asn Glu Tyr Pro Asp Ser Cys Ala Val Leu Val
      180            185            190
Arg Arg His Gly Val Tyr Val Trp Gly Glu Thr Trp Glu Lys Ala Lys
      195            200            205
Thr Met Cys Glu Cys Tyr Asp Tyr Leu Phe Asp Ile Ala Val Ser Met
      210            215            220
Lys Lys Val Gly Leu Asp Pro Ser Gln Leu Pro Val Gly Glu Asn Gly
      225            230            235            240
Ile Val
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<210> 3

<211> 726

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1) .. (726)

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gcg	cag	gac	aag	gag	cac	ccc	cga	ttc	ctg	atc	cca	gaa	ctt	tgc	aaa	96
Ala	Gln	Asp	Lys	Glu	His	Pro	Arg	Phe	Leu	Ile	Pro	Glu	Leu	Cys	Lys	
			20					25					30			
cag	ttt	tac	cat	ctg	ggc	tgg	gtc	acc	ggc	act	gga	ggg	gga	atc	agc	144
Gln	Phe	Tyr	His	Leu	Gly	Trp	Val	Thr	Gly	Thr	Gly	Gly	Gly	Ile	Ser	
			35				40						45			
ttg	aag	cat	ggc	aat	gaa	atc	tac	att	gct	ccc	tca	ggc	gtg	caa	aag	192
Leu	Lys	His	Gly	Asn	Glu	Ile	Tyr	Ile	Ala	Pro	Ser	Gly	Val	Gln	Lys	
			50				55					60				
gaa	cgc	att	cag	cca	gaa	gac	atg	ttt	gtg	tgt	gac	att	aat	gag	cag	240
Glu	Arg	Ile	Gln	Pro	Glu	Asp	Met	Phe	Val	Cys	Asp	Ile	Asn	Glu	Gln	
			65			70				75					80	
gac	ata	agc	ggg	cct	cca	gca	tct	aag	aag	ctg	aaa	aaa	agc	cag	tgc	288
Asp	Ile	Ser	Gly	Pro	Pro	Ala	Ser	Lys	Lys	Leu	Lys	Lys	Ser	Gln	Cys	
				85						90					95	
act	cct	ctt	ttc	atg	aat	gct	tat	acc	atg	aga	gga	gct	ggc	gca	gtg	336
Thr	Pro	Leu	Phe	Met	Asn	Ala	Tyr	Thr	Met	Arg	Gly	Ala	Gly	Ala	Val	
				100						105				110		
att	cat	acc	cac	tct	aaa	gct	gct	gtg	atg	gct	acc	ctt	ctg	ttt	cca	384
Ile	His	Thr	His	Ser	Lys	Ala	Ala	Val	Met	Ala	Thr	Leu	Leu	Phe	Pro	
				115				120					125			
gga	cag	gag	ttt	aaa	att	aca	cat	caa	gag	atg	atc	aaa	gga	ata	agg	432
Gly	Gln	Glu	Phe	Lys	Ile	Thr	His	Gln	Glu	Met	Ile	Lys	Gly	Ile	Arg	
			130					135				140				
aaa	tgt	acc	tca	gga	ggc	tat	tac	aga	tac	gat	gat	atg	tta	gtg	gta	480
Lys	Cys	Thr	Ser	Gly	Gly	Tyr	Tyr	Arg	Tyr	Asp	Asp	Met	Leu	Val	Val	
				145				150			155				160	
cct	att	att	gag	aac	act	cct	gaa	gag	aag	gat	ctc	aaa	gaa	agg	atg	528
Pro	Ile	Ile	Glu	Asn	Thr	Pro	Glu	Glu	Lys	Asp	Leu	Lys	Glu	Arg	Met	
				165						170				175		
gct	cat	gcc	atg	aac	gag	tac	cca	gac	tcc	tgt	gcg	gtt	ctt	gtc	cgg	576
Ala	His	Ala	Met	Asn	Glu	Tyr	Pro	Asp	Ser	Cys	Ala	Val	Leu	Val	Arg	
				180						185				190		
cgt	cat	ggg	gtg	tac	gtg	tgg	gga	gaa	aca	tgg	gag	aaa	gca	aaa	acc	624

Arg His Gly Val Tyr Val Trp Gly Glu Thr Trp Glu Lys Ala Lys Thr
 195 200 205

atg tgt gag tgt tat gac tac ctg ttt gac att gct gtc tcc atg aag 672
 Met Cys Glu Cys Tyr Asp Tyr Leu Phe Asp Ile Ala Val Ser Met Lys
 210 215 220

aag atg gga ctc gat cca aca cag ctc cca gtt gga gaa aat gga att 720
 Lys Met Gly Leu Asp Pro Thr Gln Leu Pro Val Gly Glu Asn Gly Ile
 225 230 235 240

gtg taa 726
 Val

<210> 4
 <211> 241
 <212> PRT
 <213> Mus musculus

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 20 25 30
 Gln Phe Tyr His Leu Gly Trp Val Thr Gly Thr Gly Gly Gly Ile Ser
 35 40 45
 Leu Lys His Gly Asn Glu Ile Tyr Ile Ala Pro Ser Gly Val Gln Lys
 50 55 60
 Glu Arg Ile Gln Pro Glu Asp Met Phe Val Cys Asp Ile Asn Glu Gln
 65 70 75 80
 Asp Ile Ser Gly Pro Pro Ala Ser Lys Lys Leu Lys Lys Ser Gln Cys
 85 90 95
 Thr Pro Leu Phe Met Asn Ala Tyr Thr Met Arg Gly Ala Gly Ala Val
 100 105 110
 Ile His Thr His Ser Lys Ala Ala Val Met Ala Thr Leu Leu Phe Pro
 115 120 125
 Gly Gln Glu Phe Lys Ile Thr His Gln Glu Met Ile Lys Gly Ile Arg
 130 135 140
 Lys Cys Thr Ser Gly Gly Tyr Tyr Arg Tyr Asp Asp Met Leu Val Val
 145 150 155 160
 Pro Ile Ile Glu Asn Thr Pro Glu Glu Lys Asp Leu Lys Glu Arg Met
 165 170 175
 Ala His Ala Met Asn Glu Tyr Pro Asp Ser Cys Ala Val Leu Val Arg
 180 185 190
 Arg His Gly Val Tyr Val Trp Gly Glu Thr Trp Glu Lys Ala Lys Thr
 195 200 205
 Met Cys Glu Cys Tyr Asp Tyr Leu Phe Asp Ile Ala Val Ser Met Lys

210	215	220
Lys Met Gly Leu Asp Pro Thr Gln Leu Pro Val Gly Glu Asn Gly Ile		
225	230	235
Val		240

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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Peptide

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Lys Thr Leu Lys Asp Arg Met Ala His Ala Met Asn Glu Tyr Pro Asp
20 25 30

Ser Cys

<210> 6
 <211> 34
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20 25 30

Ser Cys

<210> 7

<211> 30
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<213> Artificial Sequence

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<210> 8
<211> 33
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<213> Artificial Sequence

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Primer

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33

<210> 9
<211> 33
<212> DNA
<213> Artificial Sequence

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Primer

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33

<210> 10
<211> 33
<212> DNA
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33

<210> 11

<211> 33

<212> DNA

<213> Artificial Sequence

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<210> 12

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<210> 13

<211> 33

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<210> 14

<211> 8

<212> PRT

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5

<210> 15

<211> 30

<212> DNA

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<210> 16

<211> 39

<212> DNA

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<211> 39

<212> DNA

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<210> 18

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<210> 19
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<220>
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Primer

<400> 23

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